

### ABSTRACT

C2

It is desirable to have selective markers suitable for screening of thermophilic bacteria such as *Thermus thermophilus*. *T. thermophilus* are good research materials for investigating the interrelation between enzyme structures and functions since they are stable at extreme pH, crystallize easily and are easy-to-handle. Novel mutants of *Staphylococcus aureus* kanamycin nucleotidyltransferase with markedly improved thermostability are disclosed, as well as a selective marker using the same, and a screening method for thermophilic bacteria such as *T. thermophilus* using said selective marker.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com